

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Carolina Alonso

GENERAL INFORMATION:

Name:	Arkema Inc.
Address:	4444 Industrial Parkway; P.O. Box 187 Calvert City, Kentucky 42029
Date application received:	March 12, 2006
SIC/Source description:	2819/ SOCMI
Source I. D.	021-157-00007
Source A.I.	2918
Activity number:	APE20060001, APE20060004
Permit number:	V-03-015 revision 1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input checked="" type="checkbox"/> Synthetic minor
<u>X</u> Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants): Ozone

EMISSIONS SUMMARY:

Pollutant	Actual (tpy) *	Potential (tpy)
PM/PM ₁₀	29.22	119.8
SO ₂	1.41	661.66
NO _x	54.55	351.44
CO	62.29	881.29
VOC	169.56	4184.45
ODS	271.64	3796.58
Single HAPs > 10 tpy Cl ₂	4.38	3232.81
Single HAPs > 10 tpy HCl	8.12	1258.40
Single HAPs > 10 tpy HF	2.54	1062.12
Source wide HAPs	21.16	5563.22

* Actual emissions are from 2005 Emission Survey (TEMPO)

SOURCE PROCESS DESCRIPTION:

The Kynar polymer plant is one of ten permitted areas for Arkema. The source is proposing an increase in the polymer production capacity (dry basis) from 18.5 million lb/year to 24 million lb/year. This project includes the following changes:

1. New polymer reactor V-303E
2. New monomer feed system to reactor E
3. New initiator feed pump
4. New reactor knockout pot C
5. New coarse latex strainer and transfer pump
6. Larger coagulator feed pumps
7. New or modified coagulator
8. New or modified wash column
9. New large alternate thickener (SEPR-5260B)
10. New mixer
11. New water tank
12. New feed pumps for east spray dryer
13. Associated piping changes

The source also proposes the following sourcewide changes:

1. Incorporate sources that are currently listed in Section C (Insignificant Activities) of the Title V permit that will be regulated under various MACT standards into Section B of the Title V permit.
2. Revise the monitoring frequency for difficult to monitor HF components in the K-97 Plant / F-32 Process.
3. Change the firing rate of the existing monomer cracking furnace.

4. Revise the duration required for the venting of the F-1122 removal sieves to either the Thermal Oxidizer or Hazardous Waste Incinerator during regeneration events.
5. Correct emission point AA PSD avoidance language.
6. Reconsider changes as outlined in the June 8, 2006 letter submitted to KDAQ (“Re: Response to DAQ’s Response to Comments on Proposed Title V Operating Permit V-03-015”).

COMMENTS:

The application for the polymer plant global expansion was received in January 3, 2006. The source has elected to accept the limits in order to preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality (PSD).

Applications received on May 30, 2006, June 12, 2006, July 31, 2006, and August 10, 2006, are included in permit V-03-015 Revision 1. None of these applications requires PSD review.